

Remarks

In this Response claims 1, 24 and 28 have been amended for clarity. Support for these amendments is found throughout the originally submitted application. No new matter has been added. Claims 1-33 are presently pending.

Claim Rejections – 35 USC 112

Claims 1-16 and 24-33 are rejected under 35 USC 112, second paragraph, as being indefinite. Specifically, it is alleged that a reference to an industry standard makes the claims inherently vague and indefinite as the industry standards are subject to change and/or revision.

The Applicants would like to point out that relative terms used in claim language that may not necessarily be precise, do not automatically render the claim indefinite under 35 USC 112, second paragraph. Acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed. “The requirement to distinctly claim means that the claim must have a meaning discernible to one of ordinary skill in the art when construed according to correct principles...” *Metabolite Labs., Inc. v. Lab Corp. of AM. Holdings*, 370 F.3d 354, 1366 (Fed. Cir. 2004).

Whether a form factor of a case includes “a plurality of external dimensions in compliance with a standard having a plurality of specifications governing the form factor and external dimensions...” is discernible to one of ordinary skill in the art. This is true regardless of whether the standard is revisable.

In *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, the court interpreted a claim limitation to be definite which specified that a certain part of a pediatric wheelchair was “so dimensioned as to be insertable through the space between the doorframe of an automobile and one of the seats.” 806 F.2d 1565 (Fed. Cir. 1986). The phrase was definite and discernible even though the length described could be subject to change and/or revision in later automobile designs.

Therefore, the Applicants respectfully assert that the rejected claim language is definite and respectfully request the withdrawal of this rejection of these claims.

Claim Rejections – 35 USC 102

In the Office Action claims 1-4 and 24 are rejected under 35 USC 102b as allegedly being anticipated by Suga et al. (US 6,052,284) (hereinafter “Suga”). The Applicant’s herein traverse this rejection of these claims.

Claim 1, as amended, recites a standardized peripheral apparatus comprising:
an integrated circuit;
a case encasing the integrated circuit, the case having a form factor including a plurality of external dimensions in compliance with a standard having a plurality of specifications governing the form factor and the external dimensions but not providing for thermal management arrangement; and
a thermal management arrangement to modify the case to provide a suitable thermal environment for the integrated circuit without causing the case to cease to comply with the standard’s form factor and external dimension specifications.

Suga does not teach, expressly or inherently, “a case encasing the integrated circuit...having a form factor including a plurality of external dimensions in compliance with a standard having a plurality of specifications governing the form factor and the external dimensions...” as recited in claim 1, for example.

Suga teaches a sealed case **20** covering a side of circuit board **10**. Nowhere does it state, and it would be improper to imply, that the case **20** is in compliance with any standard, much less one having “a plurality of specifications governing the form factor and the external dimensions...” as recited in claim 1. Because Suga does not teach this element, Suga does not anticipate this claim.

Furthermore, claims 2-4 and 24 depend from, or include limitations similar to, the above discussed limitation. For at least the reasons discussed supra, Suga does not anticipate these claims.

For at least these reasons, the Applicants respectfully request withdrawal of this rejection of these claims.

In the Office Action, claims 28 and 31 are rejected under 35 USC 102b as allegedly being anticipated by Hughes et al. (US 6,011,690) (hereinafter "Hughes"). The Applicants hereby traverse this rejection of these claims.

Claim 28, as amended, recites a system comprising:

- a host device;
- a standardized peripheral device including
 - electronic circuitry including an integrated circuit;
 - a case encasing the electronic circuitry, the case having a form factor including a plurality of external dimensions in compliance with a standard having a plurality of specifications governing the form factor and the external dimensions but not providing for thermal management arrangement; and
 - a thermal management arrangement to modify the case to provide a suitable thermal environment for the integrated circuit without causing the case to cease to comply with the standard's form factor and external dimension specifications; and
- a connector, to couple the standardized peripheral device to the host device.

Hughes does not teach, expressly or inherently, "a thermal management arrangement to modify the case" as recited in claim 28, for example.

Hughes teaches an element **26** coupled to a top cover **22** of case to disperse heat generated from an integrated circuit. Hughes does not teach, and it would be improper to imply, that the element **26** modifies the cover **22** as opposed to simply being coupled to it. Because Hughes does not teach this element, Hughes does not anticipate this claim.

Furthermore, claim 31 depends from, and includes the same limitations as claim 28. For at least the reasons discussed supra, Hughes does not anticipate this claim.

For at least these reasons, the Applicants respectfully request withdrawal of this rejection of these claim.

Claim Rejections – 35 USC 103

In the Office Action, claims 5-14, 17-19, 22-23, and 25-26 are rejected as allegedly being obvious over Suga in view of Glezer et al. (US 6,588,497) (hereinafter "Glezer"). The Applicants herein traverse this rejection of these claims.

Claims 5-14 and 25-26 depend from, or include limitations similar to, claim 1. Suga and Glezer, alone or in combination, fail to teach, expressly or inherently, “a case encasing the integrated circuit...having a form factor including a plurality of external dimensions in compliance with a standard having a plurality of specifications governing the form factor and the external dimensions...” as recited in claim 1, for example. As discussed supra, Suga fails to teach this element. Because Glezer also fails to correct for this deficiency, the combination cannot be said to make these claims obvious.

Furthermore, the Applicants assert that there is insufficient motivation to combine these references as described in the Office Action. In the Office Action it is conceded that Suga does not teach a flow generating device. However, the Office Action goes on to state that “it would have been obvious to modify the standardized peripheral apparatus of Suga et al. with that of Glezer et al. for the purpose of providing flow generating device to increase air flow movement.” The Applicants traverse this statement.

In Suga, it specifically states that “forced air cooling does not sufficiently achieve the intended purpose of cooling LSIs of large calorific power.” Suga column 1, lines 27-28. Thus, Suga expressly teaches away from the use of “a flow generating device to increase air flow movement” within the sealed case 20 and therefore there is insufficient motivation to modify Suga with this particular element of Glezer.

Because there is insufficient motivation to combine these references in the manner proposed, the combination cannot be relied upon to make subject matter of these claims, as a whole, obvious.

Claim 17 provides for a standardized peripheral apparatus comprising:

- an integrated circuit;
- a case encasing the integrated circuit, the case having
 - an outlet vent disposed on a first portion of a first surface of the case to facilitate exhaust of heat generated by the integrated circuit, into ambient;
- and
 - an inlet vent disposed on a second portion of a second surface of the case, to facilitate an intake of air from the ambient;
 - a flow generating device disposed inside the case, to at least facilitate an air flow over the integrated circuit in a general direction from the inlet vent to the outlet vent; and

a connector, to directly couple the apparatus to a host device in a substantially rigid relationship.

As discussed above, there is insufficient motivation to modify Suga with Glezer's flow generating device to facilitate an air flow. Therefore, this combination cannot be relied upon to make subject matter of claim 17, as a whole, obvious.

Claims 18-19 and 22-23 depend from, and include the same limitations as, claim 17. Therefore, these claims are patentable over these references for at least the same reasons.

For at least these reasons, the Applicants respectfully request withdrawal of this rejection of these claims.

In the Office Action, claims 29 and 32 are rejected as allegedly being obvious over Hughes in view of Demeter et al. (US 6,439,992) (hereinafter "Demeter"). The Applicants herein traverse this rejection of these claims.

Claims 29 and 32 depend from, and include the same limitations as, claim 28.

The combination of Hughes and Demeter fails to teach, expressly or inherently, "a thermal management arrangement to modify the case" that encases the electronic circuitry as recited in claim 28, for example. As discussed supra, Hughes fails to teach this element. Because Demeter also fails to correct for this deficiency, the combination does not make these claims obvious.

Furthermore, Applicants assert that there is insufficient motivation to combine these references in the manner proposed in the Office Action. There is nothing in either of the references, or in the prior art in general, that would suggest using the teachings of Demeter (a fan disclosed within a box that directs airflow towards a gaming console that may be positioned on the box) to modify the casing of the PC card taught in Hughes. It appears to the Applicants that if you were to combine the teachings of these references, it would result in substituting the gaming console of Demeter with the PC card of Hughes, e.g., setting the PC card on the outlet port 20. Even this combination would be improperly motivated as there would be no reason to set a PC card (which is inactive independent from the host device) on the port 20 for cooling.

For at least the above reasons, the Applicants respectfully request withdrawal of this rejection of these claims.

Claim 30 is rejected under 35 USC 103a as allegedly being obvious over Hughes, in view of Demeter and further in view of Glezer. The Applicants herein traverse this rejection of this claim.

Claim 30 depends from, and includes the same limitations as, claims 29 and 28. Because Hughes fails to teach, all of the elements of claim 28; the combination of Hughes and Demeter is improperly motivated and fails to teach or make obvious all of the elements of claim 29; and because Glezer fails to correct for these deficiencies, this claim is patentable over this combination.

For at least these reasons, the Applicants respectfully request withdrawal of this rejection of this claim.

Claim 33 is rejected under 35 USC 103a as allegedly being obvious over Hughes. The Applicants herein traverse this rejection of this claim.

Claim 33 depends from, and includes all of the limitations of, claim 28. For at least the reason that Hughes does not include of the elements of claim 28, as discussed supra, this claim is patentable over this reference.

For at least this reason, the Applicants respectfully request withdrawal of this rejection of this claim.

Conclusion

Applicant respectfully submits that the claims 1-33 are presented in allowable form. Accordingly, a Notice of Allowance is respectfully requested.

If the Examiner has any questions, he is invited to contact the undersigned at (503) 796-2972.

The Commissioner is hereby authorized to charge shortages or credit overpayments to Deposit Account No. 500393.

Respectfully submitted,
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